# Work Order ID 67526 -/

Monday, March 28, 2011 9:06:39 AM



Page 1

Item ID: I Revision ID:	23319-1		Accept				s	etup Start		
Item Name: V	Vearplate							Stop		
Start Date: 3 Required Date: 3 Reference:	/28/2011 Start Qty: 12:00 /31/2011 Req'd Qty: 12:00			Cust Item I Customer:	ID:					
Approvals:	Process Plan: 1/	Date: //-03	Fooling:	D	ate:		R	un Star	t	
	QC:	Date:	SPC (Y/N):		ate:			Stop		
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID		Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr									
D3319	Rev B									
100 Waterjet	FLOW WATER JET		0.00				B11-	3-28		
FLOW CNC Waterjet		B	3.50						0	
110	QC2- Inspect parts off	machine FAI/FAIB	0.00							
QC QC	Memo		0.00				BI	1-3- 28		
Quality Control	QC8- Inspect parts - se	cond check	0.00_							
QC Quality Control	Memo		0.00 Sulo31	28			K15			

Dart Ae	rospace Ltd	
W/O:		WORK ORDER CHANGES
DATE	CTED	PROCEDURE CHANGE

DATE	STEP		PROCEDU	RE CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						7				1
		14								
			93					, will	- Viney	Marc 110
Part No	:		PAR #: Fa	u t Category:	NCR:	Yes	No DQA	ı:	_ Date: _	
	F	Resolution:	Di	sposition:	QA: N	VC C	losed:	• I • I	_ Date: _	

NCR:			WORK ORDE	ER NON-CONFORMANC	E (NCR)			
		Description of NC		Corrective Action Section B		Verification	Approval	Approval
DATE	STEP	Description of NC Section A	Init al Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
						The same of	101-4	

NOTE: Date & initial all entries

## Work Order ID 67526

Monday, March 28, 2011 9:06:39 AM



Page 2

Item ID:

D3319-1

Accept



Setup Start

Run

Stop



Revision ID:

Item Name: Wearplate

Required Date: 3/31/2011

3/28/2011

Start Qty: 12.00 Req'd Qty: 12.00

Cust Item ID: Customer:

Reference:

Start Date:

Approvals:

Process Plan:

Date: Date:

2- Form flat on press using DT8776 block

Tooling:

Date:

Start



QC:

SPC (Y/N):

Date:

Tool # Plan

Code

Stop

Reject

Qty



Number Stamp

Insp.

Reject

Sequence ID/ Work Center ID

140

Brake NC

Operation Description

NC BRAKE

Set Up/ **Run Hours** 

0.00

1- Form using DT8326 & DT8261 as per Dwg D3319Rev: 5

Tool ID

Accept

Qty

Brake NC

150

Quality Control

QC6- Inspect dimensions to drawing

Memo

Memo

0.00

Sul03/29

160

Large Fab

Weld per dwg A/R Hardcoat steel Batch: 12116772

0.00

Large Fab

0.00

Large Fab

1- Layout weld location as per Dwg D3319 using jig D3319-1T3

2- Weld hard surface using DT8755 per QSI 004 and Dwg D3319 Rev:

Part Number A/R N/A

Description 228/7560 Hardcoat Rod

Dart Aeros	pace L	td
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W/O:				WOF	RK ORDER CHANG	ES					
DATE	STEP	PRO	OCEDURE	CHAN	GE	В	у	Date Q	ty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No		PAR #:									
	R	esolution:						- 24		_ Date: _	
NCR:			WORK	ORDE	R NON-CONFORMA	NCE (I	VCR)				
DATE	0.755	Description of NC			orrective Action Secti			Verificati	on	Approval	Approval
DATE	STEP	Section A	Initia Chief E		Action Description Chief Eng		ign & Date	Section C		Chief Eng	QC Inspector
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## Work Order ID 67526

Monday, March 28, 2011 9:06:39 AM



Page 3

Item ID:

D3319-1

Accept

Setup Start



Revision ID:

Item Name:

Wearplate

3/28/2011

Start Qty: 12.00

Req'd Qty: 12.00



Cust Item ID: Customer:

Reference:

Start Date:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Start

Stop



OC:

Required Date: 3/31/2011

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID

170

Quality Control

Operation Description

QC10- Inspect visual per QSI004- ground welds

Memo

Memo

Set Up/ **Run Hours** 

Tool ID

Tool # Plan Code Accept Reject Qty

Qty

Run

Reject Number

Insp. Stamp

8 wallos

180

Quality Control

QC5- Inspect part completeness to step on W/O

8 11/04/06

190



Powder Coating

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

m 115128

Memo

START TIME: OVEN TEMPERATURE

FINISH TIME:

0.00

0.00

3 H11-4-6

# Dart Aerospace Ltd

W/O:				WO	RK ORDER CHANGI	ES					
DATE	STEP	PRO	CEDURE	CHAN	IGE	В	у	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No		PAR #:									
	R	esolution:								Date:	
NCR:		1	WORK (	ORDE	R NON-CONFORMA	NCE (I	NCR)				
		Description of NC			Corrective Action Section			Verific	ation	Approval	Approval
DATE	STEP	Section A	Initi Chief E		Action Description Chief Eng		ign & Date	Secti		Chief Eng	QC Inspector
								-			

#### Work Order ID 67526

Monday, March 28, 2011 9:06:39 AM



Page 4

Item ID:

D3319-1

Accept

Setup Start



Revision ID:

Start Date:

Wearplate Item Name:

Required Date: 3/31/2011

3/28/2011

OC:

Start Oty: 12.00

Req'd Qty: 12.00

Cust Item ID: Customer:

Tool ID

Reference:

Approvals:

Process Plan:

Date: Date: Tooling:

Date: Date:

Tool # Plan

Start

Stop

Stop

Sequence ID/

Work Center ID

200

Quality Control

Operation Description

QC3- Inspect Part Finish

Memo

Set Up/ Run Hours

SPC (Y/N):

0.00

0.00

Code Oty

Reject Accept Otv

Run

Reject Number

Insp. Stamp

210

Packaging

Packaging

Packaging

Memo

0.00

0.00

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

P/N: D3319-1, B/N: BXXXXX For Product Eligibility see PDA05-18

and Stock Location:

220

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

ms 11-04-06

Dart Aeros	pace Ltd
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W/O:				WC	RK ORDER CHANGE	ES					
DATE	STEP	PRO	CEDURE	CHAI	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault	Cate	gory:	NCF	t: Yes N	lo DQ	A:	Date:	
	F	Resolution:	Disp	ositio	1:	QA:	N/C Clo	sed:	-1	Date: _	
NCR:		V	WORK (	ORDI	ER NON-CONFORMA	NCE	(NCR)	ý			
		Description of NC			Corrective Action Section	on B		Verific	cation	Approval	Approval
DATE	STEP	Section A	Initia Chief E		Action Description Chief Eng		Sign & Date	Secti		Chief Eng	QC Inspector
	-	*									

## **Picklist Print**

Monday, March 28, 2011 9:06:44 AM

Work Order ID: 67526

Parent Item: D3319-1

Parent Item Name: Wearplate

Start Date: 3/28/2011

Required Date: 3/31/2011

Page 1

Start Qty: 12.00

Required Qty: 12.00

Comments:

IPP: B $\square$ 05.10.14 $\square$ Added step 9, dwg rev B  $\square$ KJ/EC $\square$ IPP Rev:C Now on Waterjet 06-10-26 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010S18GA		Purchased	No			100	sf	120.0000	0.628	7.932632	95		1-12-1
										1811-	86-5		REAL PROPERTY.

1010/1025 SHEET .048

Location Loc Oty Loc Code MAT019 120 116268 120



# Dart Aerospace Ltd **WORK ORDER CHANGES** W/O: Approval Approval Chief Eng / Prod Mgr PROCEDURE CHANGE By Date Qty DATE STEP QC Inspector Part No: \_\_\_\_\_\_ PAR #: \_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_ Date: \_\_\_\_

NCR:				ER NON-CONFORMAN  Corrective Action Section B				1.0000000000000000000000000000000000000
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approva QC Inspecto

DART AEROSPACE LTD	Work Order:	47526
Description: Wearplate	Part Number:	D3319-1
Inspection Dwg: D3319 Rev: B		Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

X	First Article	Prototype
3.51		

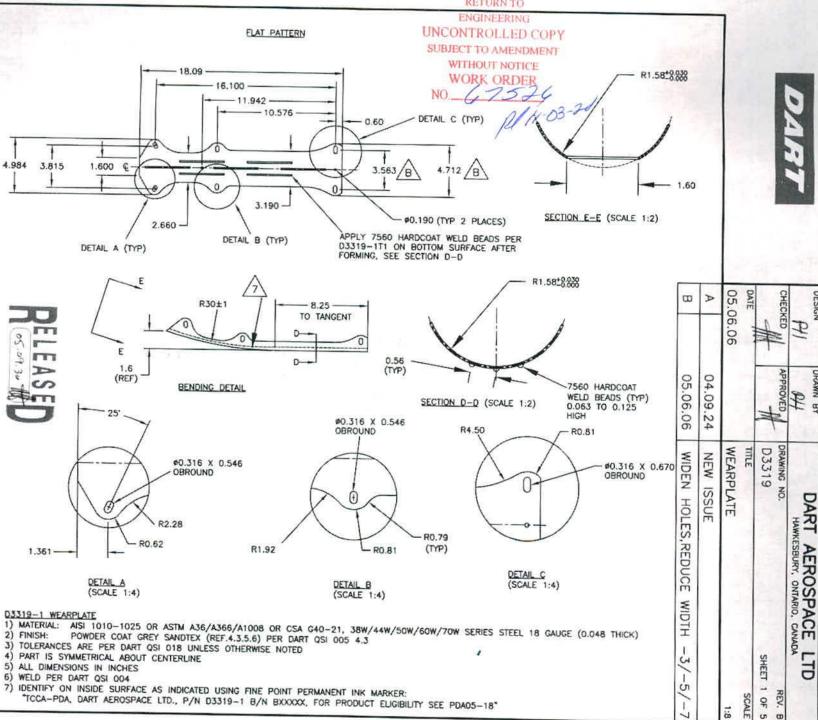
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.984	+/-0.010	4.985	X		V 1802	
1.600	+/-0.010	1.603	×		V	
2.660	+/-0.010	2,668	7		V	
3.190	+/-0.010	3,196	7		V	
3.563	+/-0.010	3.560	8		V	
4.712	+/-0.010	4.713	le .		٧	
0.60	+/-0.030	,603	×		٧	
10.576	+/-0.010	10.00	8		T 1801	
11.942	+/-0.010	11.947	0		T	
18.09	+/-0.030	18.69	X		7	
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Ø0.316 x 0.670	+0.006/-0.001 x +/-0.010	316 X 674	>		V	
Ø0.190	+0.005/-0.001	091,	80		V	

Measured by:	IB	Audited by:	6	Prototype Approval:	N/A
Date:	11-3-08	Date:	1103/28	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	07.05.31	New Issue	Revised by KJ/JLM	Cull
			1,00	7211

Dart Aerosp	ace Ltc	ı
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W/O:			WO	RK ORDER CH	ANGES					
DATE	STEP	PRO	OCEDURE CHAP			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Egy										
				71						
	M. A									- by
Part No	:	PAR #:	The second second			R: Yes				
	Re	esolution:	Disposition	ı:	QA	: N/C CId	sed:		Date: _	
NCR:			WORK ORDI	R NON-CONFO	RMANCE	(NCR	)			
DATE	OTED	Description of NC		Corrective Action	Section B		Verifi	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Descri Chief Eng	otion	Sign & Date		ion C	Chief Eng	QC Inspector
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W/O:				WORK ORDER	CHANGES					
DATE	STEP	PRO	CEDURE	CHANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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										L.
Part No	:	PAR #:	Fault	Category:	NC	R: Yes	No DQA	٠:	_ Date: _	
	R	esolution:	Disp	osition:	QA	: N/C CI	osed:		Date: _	
NCR:			WORK (	ORDER NON-COM	NFORMANCE	(NCR	)			
		Description of NC		Corrective Action	on Section B		Verific	ation	Approval	Approval
DATE	STEP	Section A	Initia Chief E			Sign & Date	Section		Chief Eng	QC Inspector
						7.				

		Description of NC		Corrective Action Section B		Verification	Approval	Approval
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description  Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector

APPLY 7560

WELD BEADS

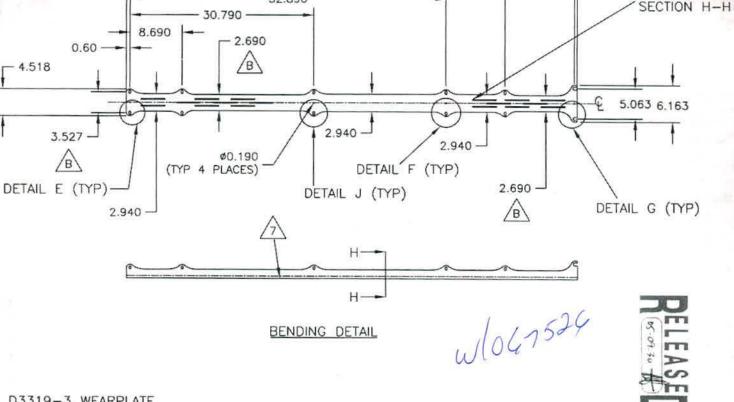
ON BOTTOM

PER D3319-3T1

SURFACE AFTER

FORMING, SEE

HARDCOAT



FLAT PATTERN

- 75.52 -

74.420 -

62.770

- 52.890

#### D3319-3 WEARPLATE

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- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

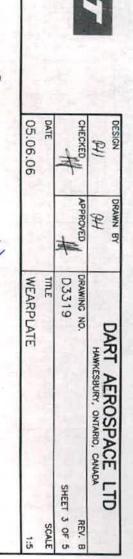
1:15	WEARPLATE		5.06.06
SCALE	TITLE		ATE
SHEET 2 OF 5	D3319	#	*
REV. B	DRAWING NO.	APPROVED	HECKED
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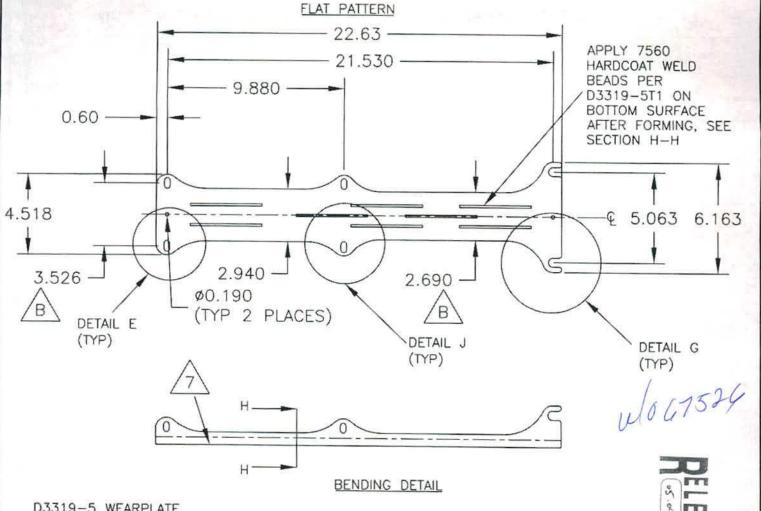
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W/O:				WO	RK ORDER CHANGE	ES					
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DATE	STEP	Description of NC			Corrective Action Section	n B	0: 0	Verific	ation	Approval	Approval
DATE	SIEP	Section A	Initia Chief Er		Action Description Chief Eng		Sign & Date	Section	on C	Chief Eng	QC Inspector







## D3319-5 WEARPLATE

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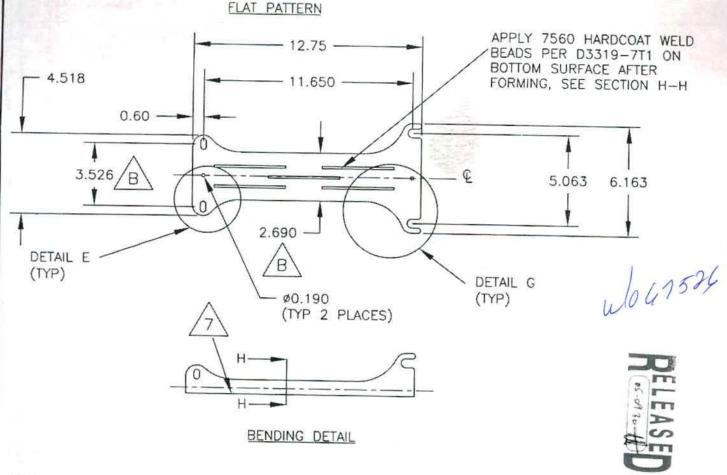
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- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21. 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX. FOR PRODUCT ELIGIBILITY SEE PDA05-18"

Dart Aerospace Ltd	Ŀ	
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W/O:				WORK	ORDER CHANG	SES					
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DATE	STEP Description of NC Section A	Description of NC		Corrective Action Section B			Verificat		ation	Approval	
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#### D3319-7 WEARPLATE

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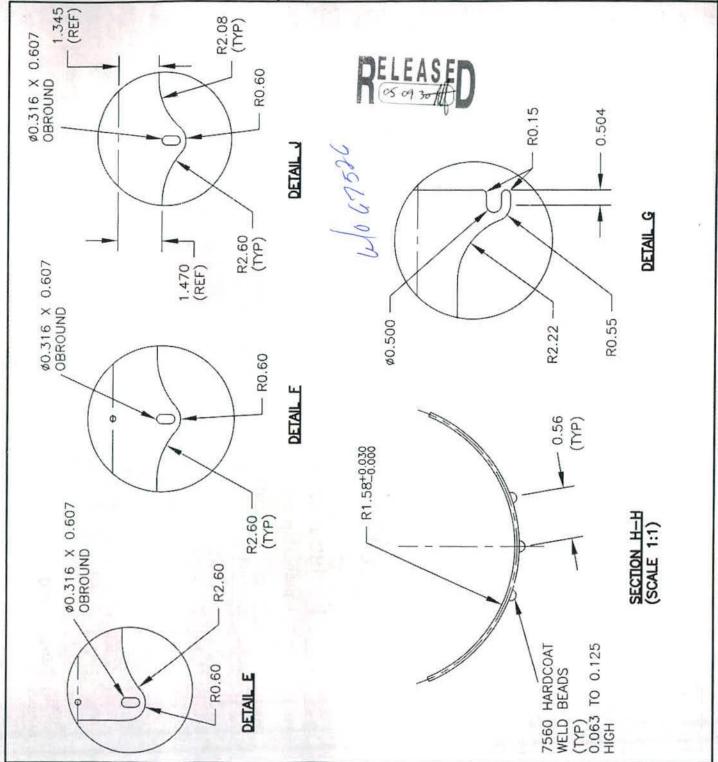
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-7 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

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DESIGN	DRAWN BY		SPACE LTD ONTARIO, CANADA
CHECKED	APPROVED #	DRAWING NO. D3319	REV. B SHEET 5 OF 5
DATE 05.06.06		WEARPLATE	SCALE 1:3



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		STEP Description of NC Section A Initial Chief En		Corrective Action Section B		A	Verificat	Verification		Approval
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